

***Astragalus microcystis* Gray**

least bladdery milk-vetch
Fabaceae (Pea Family)

Status: State Sensitive

Rank: G5S2

General Description: Tap-rooted perennial with many stems arising from an exposed rootcrown, spreading along the ground or ascending, 4-20 inches long; leaves compound with 9-15 leaflets, grayish-green and hairy, the lowest stipules fully surrounding the stem; racemes loosely 5-12 flowered, flowers pink or pale lavender to deep magenta purplish, keel petals 1/8 to 1/4 inch and banner <3/8 inch; pods sessile 1/3 to 1/2 inch long, inflated and slightly compressed.

Identification Tips: In the eastern Olympic Mountains, the species occurs in the same range as *A. cottonii* and *A. lentiginosus* var. *lentiginosus*. *A. cottonii* has a longer banner (3/8 to 5/8 inch) and *A. lentiginosus* var. *lentiginosus* has a longer pod (> 1/2 inch) than *A. microcystis*. In northeastern WA, *A. canadensis* var. *mortonii* and *A. alpinus* var. *alpinus* occur within the same range as *A. microcystis*. *A. canadensis* is much taller than *A. microcystis*, ranging in height from 12 to 32 inches and the keel petals of *A. alpinus* var. *alpinus* are longer (> 1/4 inch) than those of *A. microcystis*.

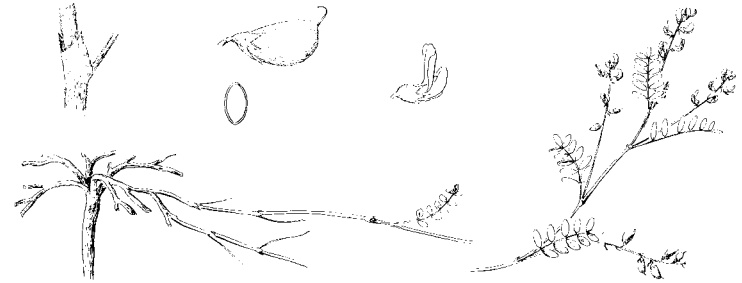
Phenology: Identifiable late April through August.

Range: Eastern Olympic Mountains and northeast Washington, also southern British Columbia, northern Idaho, and western Montana. Occurs in the Columbia Basin, Okanogan Highlands, and the Olympic Peninsula and Southwest Washington physiographic provinces.

Habitat: In the Olympic Mountains, the species occurs on dry gravelly soils in the alpine zone (6000 feet) in typical cushion plant communities including purplefringe (*Phacelia sericea*), alpine smelowskia (*Smelowskia calycina*), cutleaf daisy (*Erigeron compositus*), and featherleaf kittenstails (*Synthyris pinnatifida*). The species shows a strong correlation with limestone-like rock. In eastern Washington, the species occurs on gravelly to sandy areas, from riverbanks to open woods. Associated species in eastern WA include common gaillardia (*Gaillardia aristata*),

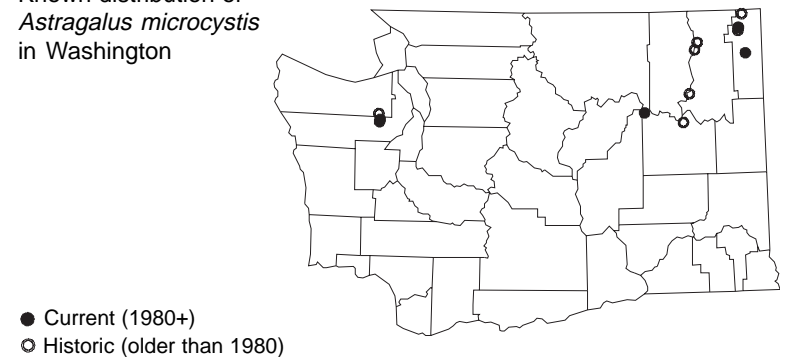
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Known distribution of
Astragalus microcystis
in Washington



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Mark Sheehan



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Habitat (continued): scarlet gilia (*Gilia aggregata*), and white sweet-clover (*Melilotus alba*). Elevation ranges from 1400 to 6200 feet.

Ecology: Plants from lower elevations and from lake shores tend to have longer stems, wider leaflets, more numerous flowers, and larger pods than those in the mountains. The species has a broad ecological amplitude, occurring in subalpine to alpine zones in the Olympic Mountains and at relatively low elevations in eastern WA.

State Status Comments: The species is peripheral in eastern Washington, but disjunct in the Olympic Mountains. The relatively small range in the state and the low number of occurrences are the main factors responsible for its status.

Inventory Needs: Historical occurrences need to be verified. Additional inventory throughout its range in WA is needed.

Threats and Management Concerns: In the Olympic Mountains, introduced mountain goats and the erosion that results from their use of habitat is of concern. The damming of the Pend Oreille River in northeastern WA presumably resulted in lost habitat. Timber harvest activities and herbicide application may also have localized negative affects.

References:

Barneby, R.C. 1964. *Atlas of North American Astragalus Part I: The Phacoid and Homaloboid Astragali*. Memoirs of the New York Botanical Garden Vol 13: 355-357.

Buckingham, N.M., E.G. Schreiner, T.N. Kaye, J.E. Burger and E.L. Tisch. 1995. *Flora of the Olympic Peninsula*. Northwest Interpretive Association and the Washington Native Plant Society. Seattle, Washington. 199 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest, Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle. 614 pp.